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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,308	03/10/2004	Seela Raj D Rajaiah	70040140-1	4414

7590 10/05/2006

AGILENT TECHNOLOGIES, INC.
Legal Department, DL 429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER	
DANIELS, ANTHONY J.	
ART UNIT	**PAPER NUMBER**
2622	

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/797,308	RAJAIAH ET AL.	
	Examiner	Art Unit	
	Anthony J. Daniels	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment, filed 5/15/2006, has been entered and made of record. Claims 1-20 are pending in the application.

Response to Arguments

2. Applicant's arguments with respect to claims 1,8 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe (US 2001/0030694) in view of Haavisto (US 2001/0007470).

Claims 8-13 will be discussed first.

As to claim **8**, Abe teaches a device that takes an image (Figure 1, digital still camera "100"), comprising: a color filter array that captures an image (Figure 3, CCD "116"; [0030], Lines 1-9); a color sensor that detects a plurality of color components of light incident upon the color sensor (Figure 3, color temperature sensor "120"; [0023], Lines 6-12), the color sensor being separate from and not part of the color filter array (Figure 3, color temperature sensor "120" separate from CCD "116"), the color sensor including for each color component one and only one photo sensor that generates a signal ([0023], Lines 6-12, "...a red photo diode...a green photodiode...a blue photodiode..."); and, white balance calculator that uses intensity values for the plurality of color components to calculate a white balance for the image captured by the color filter array ([0036]). Although it is not stated explicitly, **Official Notice** is taken that the concept of amplifying signals accumulated on a photo sensor is well-known and expected in the art. One of ordinary skill in the art would be motivated to do this, because it produces a more manageable value for processing. The claim further differs from Abe in that it further requires a converter that generates an average intensity value for each of the plurality of color components.

In the same field of endeavor, Haavisto teaches a camera (Figure 1) performing white balance on an image taken by an image pickup unit. The camera utilizes a light measuring sensor, separate from the image pickup unit, that provides an overall intensity of the illuminating light used for balancing the intensities of the color components of the image produced by the image pickup unit ([0037]). The signal representing the overall intensity is accumulated on a

photodiode. An analog-to-digital converter (Figure 1, "54") then converts that signal to a digital signal that is then forwarded to a control unit to perform the aforementioned white balancing ([0037]). In light of the teaching of Haavisto, it would have been obvious to convert the RGB signals accumulated in the color temperature sensor of Abe to digital signals before being used for color temperature calculation, because an artisan of ordinary skill in the art would recognize the numerous advantages of utilizing digital signals in calculation.

Remarks about the rejection of claim 8: A closer examination of current application's (10/797,308) specification concludes that the average intensity value is simply a digital signal that is an average of only one signal. More specifically, the number of values used for averages is one (The average value is just the digital version of the signal accumulated on the photo sensor.). Conventionally, an average is calculated from a plurality of values. In this case, each of the photo sensors of the color sensor would have to produce a plurality of values to achieve the aforementioned conventional average. The specification does not have support for this occurrence.

As to claim **9**, Abe, as modified by Haavisto, teaches a device as in claim 8: wherein each of the plurality of color components is an analog value (see Abe, [0023], Lines 6-12; see Haavisto, Figure 1, input of A/D "54"); and, wherein each of the average intensity values is a digital value (see Haavisto, Figure 1, output of A/D "54").

As to claim **10**, Abe, as modified by Haavisto, teaches a device as in claim 8 wherein the device is a digital camera (see Abe, Figure 1, digital still camera "100").

As to claim **11**, Abe, as modified by Haavisto, teaches a device as in claim 8 wherein the plurality of color components include a red component, a green component and a blue component (see Abe, [0023], Lines 6-12).

As to claim **12**, Abe, as modified by Haavisto, teaches a device as in claim 8: wherein the plurality of color components include a red component, a green component and a blue component (see Abe, [0023], Lines 6-12); and, wherein the average intensity values include an average red intensity value derived from the red component, an average green intensity value derived from the green component and an average blue intensity value derived from the blue component (*The combination of Abe of Haavisto produces a digital value for each of the R,G and B signals.*).

As to claim **13**, Abe, as modified by Haavisto, teaches a device as in claim 12: wherein the red component, the green component and the blue component are analog values (see Abe, [0023], Lines 6-12; see Haavisto, Figure 1, input of A/D "54"); and, wherein the average red intensity value, the average green intensity value and the average blue intensity value are digital values (see Haavisto, Figure 1, output of A/D "54").

As to claim **14**, Abe, as modified by Haavisto, teaches a device as in claim 8 wherein the color sensor includes, for each color component, a photo sensor with an integrated filter (see Abe, [0023], Lines 6-12).

As to claims **1-6**, claims 1-6 are method claims corresponding to the apparatus claims 8-13, respectively. Therefore, claims 1-6 are analyzed and rejected as previously discussed with respect to the apparatus claims 8-13, respectively.

As to claim **7**, Abe, as modified by Haavisto, teaches a method as in claim 1 wherein capturing the image and detecting the plurality of color components are performed simultaneously allowing for parallel processing (see Abe, Figure 3).

As to claims **15-20**, the limitations of claims 15-20 can be found in claims 8-13, respectively. Therefore, claims 15-20 are analyzed and rejected as previously discussed with respect to claims 8-13, respectively.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Daniels whose telephone number is (571) 272-7362. The examiner can normally be reached on 8:00 A.M. - 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AD
9/30/2006

NGOC-YEN VU
SUPERVISORY PATENT EXAMINER